

CLAIMS

Claim 1: An improved intercropping and mulching method, said improved intercropping and mulching method comprising:

- 10 (1) planting an annual green manure crop in the soil of a predetermined area;
- (2) harvesting said annual green manure crop the following spring, said annual green manure crop being combined with organic residue to form combined green manure, said combined green manure comprising a first portion and a second portion, said second portion of said combined green manure further blended with said soil of said predetermined area, said first portion
- 15 becoming a combination mulch,
- (3) intercropping at least two commercial crops within said soil blended with said combined green manure,
- (4) thereafter dispersing said first portion of said combined mulch upon said soil of said predetermined area, said predetermined area now containing seeds of said first commercial crop
- 20 and second commercial crop,

whereby, said combined green manure provides nutrients to said commercial crops and said combination mulch provides a ground cover and nutrients for said intercropped commercial crops, said green manure crop and organic debris protecting said soil of said predetermined area during the winter.

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Claim 2. The improved intercropping and mulching method as described in Claim 1, wherein said first intercropped commercial crop comprises a legume.

Claim 3. The improved intercropping and mulching method as described in Claim 1, wherein said 30 first intercropped commercial crop comprises soybeans.

Claim 4. The improved intercropping and mulching method of Claim 1 wherein one said intercropped commercial crop comprises corn.

5 Claim 5: The improved intercropping and mulching method of Claim 1 wherein two said commercial crops comprise corn and soybeans.

Claim 6: The improved intercropping and mulching method as described in Claim 1, wherein there are no intercropped plants other than a first and second intercropped commercial plants,

10 said first and second intercropped commercial plants comprising corn and soybeans.

Claim 7: The improved intercropping and mulching method as described in Claim 6 wherein said corn and said soybeans are planted in an alternating patterns comprising soybean areas and corn rows, each area and row comprising a predetermined lateral width.

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Claim 8. The improved intercropping and mulching method as described in Claim 7, wherein said green manure crop comprises buckwheat.

Claim 9. The improved intercropping and mulching method as described in Claim 1, wherein said

20 legume commercial crop is from the group consisting of Austrian peas, hairy vetch, red clover, soybeans, annual rye grass, and winter rye, and said green manure crop comprises buckwheat and wheat.

Claim 10. The improved intercropping and mulching method as described in Claim 7, wherein

25 said green manure crops are mowed with a conventional mechanical forage harvester.

Claim 11. The improved intercropping and mulching method as described in Claim 1 wherein said combination green manure is sprayed upon said soil of said predetermined area after blending and chopping of said green manure plants and organic debris within a conventional bale chopper.

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Claim 12. The improved intercropping and mulching method as described in Claim 6 wherein said intercropped soybeans are planted simultaneously with said intercropped corn by using a fork lift attachment with two forks, front end loader and tractor, conventional corn planter, and a modified conventional seed drill, said modified seed drill and said fork lift attachment to said tractor by said front end loader, said fork lift attachment elevated with a hydraulic lift and a retrofit adapter.

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Claim 13. The improved intercropping and mulching method as described in Claim 12 wherein said conventional corn planter deposits corn seeds between previously planted soybean areas, said soybean areas consisting of soybean subrows, said soybean subrows deposited by said modified seed drill attached to said prior art tractor, said corn seeds deposited within straight corn furrows.

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Claim 14: An improved intercropping and mulching method for corn and soybeans, said method comprising:

(A) Planting a commercial legume crop in the soil of a predetermined area during the summer, said commercial legume crop forming organic debris within said soil after harvesting of said 25 commercial legume crop,

(B) No-till planting buckwheat and wheat during the fall in said soil of said predetermined area, said buckwheat and wheat growing until the following spring, said buckwheat and wheat covering said soil during the winter,

5 (C) Mowing and tilling said buckwheat and wheat within said soil during said following spring, said mowing and blending accomplished by using a conventional forage harvester and a conventional tilling machine, a first portion of said buckwheat and wheat forming a green manure for said soil of said predetermined area, a second portion of said buckwheat and wheat forming a mulch for said soil after intercropping of said commercial crops,

10 (D) creation of corn rows, each said corn row comprising three subrows of soybean seeds, and seeding said soybeans in alternating areas between consecutive corn rows by using a modified conventional seed drill, a fork lift and a front loader; said modified conventional seed drill comprising sets of tru-vee openers along an opener draw bar and a third frame, said tru-vee openers comprising seed tubes, each said true vee opener further comprising an opener spring, said fork lift attached to said seed drill by a first and second fork, said forks attaching to said seed drill by enclosing one set of tru-vee openers, said seed drill so aligned with said tractor so that said soybean seeds are deposited directly beneath and anterior to the tractor center,

20 (E) seeding said corn seed with a conventional corn planter attached posterior to said tractor, said corn planter creating corn furrows within said soil for planting of corn, said corn furrows containing linearly deposited corn seeds, said corn furrows spaced laterally from each other approximately 30 inches, said soybean subrows located between said corn furrows.

(F) covering said seeded soil with combination mulch, said conventional bale chopper chopping 25 said green manure plants and organic debris to create said combination mulch, said green manure plants and organic debris within a forage wagon spun into unload augers prior to

chopping within said bale chopper, said mulch sprayed onto said soil of said predetermined area with a hose attached to a conventional bale chopper mounted to a forage box wagon.

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